DOCUMENT RESUME

ED 362 274 PS 021 688

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TITLE Bridge over Troubled Waters: Connecting Children and Adults in Early Childhood Programs to Immunization and Preventive Health Care.
PUB DATE Mar 93
NOTE 53p.; A policy paper prepared for the National Association of State Boards of Education.
PUB TYPE Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Agency Cooperation; *Child Health; *Coordination; *Early Childhood Education; Educational Cooperation; *Health Programs; *Health Services; Models; Preventive Medicine; Public Policy
IDENTIFIERS *Integrated Services

ABSTRACT

This paper discusses the importance of an effective partnership between health services and early childhood programs, and examines ways that leaders in both service systems can cooperate to help caregivers, teachers, and parents raise healthy children. After examining the need for an improved partnership, the historic and contemporary role of a strong health focus in early childhood programs is explored. The paper advocates that the health needs of caregivers, teachers, and their children be addressed by cooperation between health and early education. Seven levels of intensity are outlined from which health care and early care and education programs might choose when building bridges between the two systems. Five models of partnership are described, and resources needed to make these partnerships possible are examined. The paper concludes by recommending federal and state policy steps that would support partnership-building between health and early childhood programs. (MM)

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BRIDGE OVER TROUBLED WATERS: CONNECTING CHILDREN AND ADULTS IN EARLY CHILDHOOD PROGRAMS TO IMMUNIZATION AND PREVENTIVE HEALTH CARE

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March 1993

A policy paper prepared for the National Association of State Boards of Education.

PS 021688

Acknowledgements

Thoughtful review of this paper was provided by:

- Susan Aronson, M.D., American Academy of Pediatrics;
- Wendy Lazarus, M.P.H., Children Now, Los Angeles, California;
- Joan Lombardi, Ph.D., independent consultant;
- Sara Rosenbaum, J.D., Center for Health Policy Research, George Washington University; and
- Tom Schultz, Ed.D., National Association of State Boards of Education.

I much appreciate their ideas, insights and comments.

However, responsibility for what is written here should not be attributed either to these colleagues or to the National Association of State Boards of Education.

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Bridge over Troubled Waters: Connecting Children and Adults in Early Childhood Programs to Immunization and Preventive Health Care

I. A Look into the Future: the Williams Family

It's the year 2003 - just a decade away - and four year old Mary Ellen is walking to the child care center with her mother, Sheila, a geriatric aide in a local nursing home. The 21st Century Child Care Center is housed in the local public school, but operated as a nonprofit corporation with a primarily parent board of directors. Mary Ellen's eight and a half year old brother Sean has already left with his friends for his before-school program (also housed in the local public school).

As they walk, Mary Ellen's mother Sheila is planning the day. Mary Ellen is due for a well-child checkup today and Sheila has several concerns which she wants to bring up with the nurse practitioner. She's doesn't think Mary Ellen should get her vaccination shot today, since she was ill with a fever and a cold until just the day before yesterday. She's also worried about Mary Ellen's recent refusal to go to sleep at night - sometimes staying up till almost midnight, calling for her exhausted parents.

Mary Ellen was making good progress in the family child care home (networked with the school) where she had been cared for since toddlerhood while her mother was working at the nursing home. But in the last three weeks this sleep problem had developed. She also had come down with a cold three times in the last two months. What if Mary Ellen's nightmares are caused by something or someone in the child care center? What if these colds are a symptom that she's coming down with something serious?

After leaving Mary Ellen with her caregiver/teacher, Sheila heads straight for the health outreach room at the child care center. She explains her concerns to Maria, the health coordinator, who listens sympathetically. "My Jose had sleep problems last year

when he was four. It's so hard when you work all day, take care of the house and the kids in the evening and then can't sleep at night."

Maria reminds Sheila that the nurse practitioner who visits the child care center for "vaccination and conversation" will be expecting Mary Ellen and Sheila at 4:30 that afternoon. "I'm sure the nurse practitioner can advise you," says Maria. "You know her--it's Theresa, the same one who used to make the rounds of the family child care homes in the network. She likes Mary Ellen a lot --told me yesterday she was looking forward to seeing you both again. And listen, don't worry about the health insurance. With James laid off, your family's income will meet the eligibility guidelines for WELL-FAMILY, the publicly-supported health insurance for families. We can use the same application you filled out for child care and just make the changes needed because of the lay-off."

Maria smiles at Sheila. "I'll check with Theresa and call you at work if she wants to delay Mary Ellen's shot, but plan to come in for the conversation anyway," says Maria, "you got enough worries with the layoff to have Mary Ellen getting sick a lot and nobody sleeping well either."

By 5:30 that afternoon, Sheila has met with Theresa. Mary Ellen has been given her booster shots, a well-child exam and a vision and hearing test. After some "cuddle time" Mary Ellen plays with some blocks while her mother talks to Theresa. Talking and watching Mary Ellen at the same time, Theresa explains to Sheila that nightmares can be fairly common in four year olds - and some children react by refusing to fall asleep. She suggests a few ideas for pre-sleep rituals. She also encourages Sheila to talk with Mary Ellen's caregiver/teacher Martina about her concerns.

"Martina is trained in both health and child development. She's very good at picking up on children's problems early. And she brings her children to the community health center, too - it's available for all the caregiver/teachers and their families. So she knows what we encourage parents to do when there's a sleep problem" says Theresa. She also suggests that Sheila arrange some time when she can observe Mary Ellen at the center, to see for herself if there's anything that's causing her child to have fears. Theresa also volunteers to observe Mary Ellen, too.

The nurse practitioner explains that extra colds are very common happenings in children making the progress from either home or family child care to child care center. Over time, each child's

immune system develops the needed resistance and the number of colds and other mild illnesses experienced by the child decreases. She reads from the chart their mutual assessment of Mary Ellen six months ago: "a bright, sturdy, high-energy and very outgoing child who likes to climb and run. She's ready for the child care center, where she'll benefit from the outdoor playground and the tricycle yard."

Sheila leaves for home with both Mary Ellen and Sean by the hand. In her purse is a written reminder from the nurse practitioner to call the community health center if any aspects of her family's health or development worry her. Also in her purse is the date and time of Mary Ellen's next checkup - just before graduating to kindergarten. The visit will be at the child care center, in the afternoon, so she can fit it in right around her usual time for picking up Mary Ellen.

Sheila allows herself a small sigh of relief, looks down at her two children and smiles. She then turns her thoughts to supper preparation and the kind of encouragement her spouse may need after a day of job-hunting.

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II. Introduction: The human and economic benefits of better-connected health and early care and education services

If health and early care and education services become better connected, children, parents, providers, employers and taxpayers will benefit.

Fewer children will contract preventable disease, sustain avoidable injury or arrive at school with undetected and untreated health and developmental problems that sap energy and alertness. Fewer early childhood care and education providers will have to forego their own health care (or that of their own children's), in order to care for and educate young children.

Providers of health services will find thousands of new allies among home and center-based providers--naturally occurring outreach workers who, with financial and informational support, can successfully reach many families not now participating in preventive health care.

Fewer parents will have to be absent from employment or training in order to tend either to their ill children--or to

themselves, having contracted the illness from their children. Their family's economic self-sufficiency will be more certain. And fewer parents will feel torn in two between travelling across town in one direction in order to obtain their children's immunizations--when they should simultaneously be travelling to the other end of town, to get to their jobs.

Fewer employers will have to cope with employees who are absent or unproductive, because of children's preventable disease or injury. Finally, more taxpayers will see their tax dollars being invested in more effective health and early care and education services, with even more substantial longterm economic benefits as a result.

The economic benefits of better-connected health and early care and education services are likely to be quite substantial. The longterm cost-savings associated with high-quality early care and education services, for example, is about $3 for every $1 invested. (Children's Defense Fund, 1992). The cost-savings associated with immunization is about $10 for every $1 invested. (Select Committee, 1988). Thus when early childhood programs require immunization as a condition for participation (a necessary public health safeguard in the care of two or more children) and also provide reimbursed outreach and linkage to immunization services, these early care and education services not only return $3 to every $1, they also share some of the $10 to $1 cost-savings associated with immunization.

Conversely, when preventive and primary health care providers provide outreach and linkage to early care and education services for children and families, they share in the long-term cost-savings associated with good preschool education. Tracking these integrated cost-savings over time should yield welcome information. With a resulting cost-benefit ratio that is even higher than either service system can accomplish on its own, "connected" health/early education services will likely garner greater public support and increased funds to reach more children and families, more effectively than we do now.

II. The Purpose of this Paper

This paper aims to discuss the importance of effective partnership between health services and early childhood programs. It will also examine ways that leaders in both service systems can

cooperate to help both caregiver/teachers[1] as well as parent/consumers of early childhood services raise healthy children, able and eager to learn.

This paper will:

- discuss the need for improved partnership between health services and early childhood programs;
- explore the historic and contemporary role of a strong health focus in early childhood programs;
- advocate that the health needs of caregiver/teachers and their children be addressed by cooperation between health and early education--as well as the needs of the children and families served by early care and education services;
- outline seven levels of intensity that health care and early care and education programs might choose from in building bridges between the two systems;
- describe five models of partnership;
- examine the resources needed to make partnerships more possible;
- recommend federal and state policy steps that would support partnership-building between health and early childhood programs.

III. Definitions and Assumptions

In this paper, the term family-centered health services for young children means personal health services--"services provided by, or under the direction of, physicians or other clinicians" (Klerman, 1991)-- delivered to prevent and/or treat adverse health conditions in children under eight, their parents and their siblings.

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[1]In this paper, the term caregiver/teacher means adults who provide early care and education services to young children and their families, in a variety of home and center-based settings.

In this paper, the term parents means those adults who provide the primary part of the child's parenting, whether they are parents, grandparents, relatives or others. By early childhood programs, this paper's author means the full range of programs and services intended to help both employed and nonemployed parents promote their young children's social competence. The shared focus of these programs, however, is a commitment to promoting (and to helping parents promote) young children's physical, intellectual, moral, emotional and social development.

The paper rests on the assumption that high quality early childhood programs are a useful resource to parents and children whether:

- parents are in the labor force or are primarily at home;
- the services are made available in the child's own home or in a location outside the home;
- the children are developing in typical or atypical ways; and
- the services are sponsored by neighborhood-based, workplace-based or other leadership.

Thus, when used in this paper, the term early childhood programs embraces a wide range of family support and early care and education programs--and people--who touch the lives of preschool children and their parents, including:

- family resource and support programs;
- Head Start programs, including Parent-Child Centers;
- home visitation programs;
- family child care homes (the provision of care and education for six or fewer children by a provider in her own home);
- early care and education centers located in neighborhoods, on college campuses, at or near worksites, elementary or secondary schools, churches, synagogues, etc;
- group child care homes (the provision of care and

education for seven to twelve children by two providers in the home of at least one of the providers);

- o Comprehensive Child Development Programs (CCDP's) - federally-funded demonstration programs offering a range of services to low-income children birth to six years of age and their parents;

- o specialized early intervention and/or special education services for children with developmental delay and/or disabilities as well as children at risk of disability or delay.

Both part-day and part-year as well as full-day and full-year services are included in the meaning of the term early childhood programs.

This paper does not advocate that either existing early care and education or health care providers simply take on additional responsibilities to carry out the collaborations envisioned. More staff--and better compensation for staff--are needed. As a child care center staff turnover rate of 41% (Whitebook, Howes & Phillips, 1989) indicates, many dedicated early care and education providers are already severely burdened with the problems wrought by more than two decades of public and private underfunding of child care. In most programs, too few staff, paid poverty-level wages, struggle to care well for too many children who themselves are stressed by family tension intensified by severe economic recession and high unemployment.

Thus state and national leaders committed to promoting collaboration between health and early education need to:

- o compensate and support early care and education practitioners (including child care resource and referral agency staff) who inform parents about and help them connect to immunization and preventive health care;

- o blend existing sources of health and early care and education funds more creatively;

- o invest more public and private resources in children and families and their healthy development.

Finally, this paper also rests on the assumption that a commitment to family-centered early childhood programs naturally

leads towards partnership-building with health services, for reasons described more fully elsewhere (Pizzo, 1992). A vision of early care and education services as family support services has long inspired many practitioners, scholars and advocates. (G. Morgan, personal communication, 1992). Over the last decade, this vision has been communicated in a growing body of literature (Dunst, Johanson, Trivette & Hamby, 1991; Galinsky & Weissbourd, 1992; Kagan, Powell, Weissbourd & Zigler, 1987; Pizzo, 1990, 1992; Shelton, Jeppson & Johnson, 1987; Weiss & Jacobs, 1988; Weiss & Halpern, 1991).

This is a highly desirable emphasis within early childhood services. With good reason, much of this work has focused on relationship-building: between parents and caregiver/teachers, between parents and their children, between parents and other parents. But parents stressed by anxieties about their children's health or about meeting the medical bills bring those sometimes-turbulent concerns with them to their relationships with their children's caregiver/teachers.

So, too, uninsured or underinsured early childhood educators bring stresses to their relationships with parents. If in family-centered services caregiver/teachers and parents help each other gain access to good health care services and support each other's (and their children's) physical and mental health needs, then twenty first-century early childhood services will be both more effective and more deeply family-supportive.

III. The Need for Reimbursed Partnership Between Early Care and Education Services and Health Services

The need for linkage between early childhood programs and health services originates in the health and developmental needs of young children and in current barriers to child and family participation in primary and preventive health care. Low to moderate income families--and dual wagearner and employed single parents--experience these barriers most acutely.

A. The health and developmental needs of young children

During the early years of life, young children are developing:

- immune systems capable of warding off disease;

- internal "warning" systems capable of helping them detect and avoid health and safety hazards; and

- the emotional, cognitive and social skills that enable them to communicate physical and/or emotional distress and to seek responsive adult help when in distress.

Because these abilities and skills are in early stages of development, young children are more vulnerable to illness, injury and physical or emotional damage than older children.

During the early years of life, children also need frequent visits to a principal (primary) health care provider. These visits have three purposes:

- immunization and other prevention of disease, injury and (for some children) developmental delay;

- promotion of optimal development and early detection of developmental problems;

- treatment of minor injury, mild respiratory and gastrointestinal illnesses; and (for some children) diagnosis and referral of children with serious illness and/or severe developmental delay to appropriate specialized services.

The youngest children (0-4) need the most frequent visits. Thus as participation in child care increases for the youngest children in low-income communities, so does the need for partnership between health care and early care and education services.

<u>One example: the need to prevent or minimize infectious illness</u>

Of all the predictable occurrences of early childhood, among the most predictable is the relatively high incidence of infectious illness, compared to the incidence in later childhood. Young children who have not been vaccinated or have not had prior exposure do not have the immunity to a number of infectious illness that older children have. In fact, although vaccines can prevent some of these illnesses, young children develop immunity to some other infectious illnesses only by contracting these illnesses and experiencing them.

Thus a certain amount of infectious illness in early childhood is inevitable and one might say even necessary. While parents of young children need access to primary care services for a variety of medical and developmental needs, among the most frequent causes of visits to a primary care service is infectious illness: ear infections, colds, stomach flus, etc.

When very young children participate in out-of-home early childhood programs, the infectious illness-related need for primary health care services increases. Participation in child care groups increases the risk of contracting infectious illness (American Public Health Association/American Academy of Pediatrics (APHA/AAP), 1992; Aronson & Gilsdorf, 1986; Aronson, 1989; Granoff & Cates, 1985; Jarman & Kohlenberg, 1988; National Academy of Sciences (NAS), 1990; Feigin & Pickering, 1990). These risks can be minimized by immunization, good health practices by the child care provider and regular participation in preventive health care (Aronson, 1989; Feigin & Pickering, 1990).

Without immunization, however, small children participating in child care are likely to be at greater risk of contracting vaccine-preventable disease than children at home who have limited contact with nonfamily members. If outbreaks of vaccine-preventable disease occur, unimmunized children in child care (e.g. in license-exempt family child care homes), are likely to be among the most vulnerable children in the community.

Consequently, just the infectious disease risks alone - for both young children at home as well as young children in out-of-home child care--indicate that participation in preventive and primary care for young children is essential. However, it's clear that very young children--and low-income children in particular --are not getting the primary health care that they need. Among children under two generally, complete coverage with the basic immunization series is estimated at between 50 to 60 percent (Centers for Disease Control (CDC), 1990).

These low rates of coverage result in unnecessary illness and morbidity each year among preschool children. There were 18,000 cases of measles in 1989 and more than 25,000 cases in 1990 (National Vaccine Advisory Committee (NVAC), 1991) The 1989 incidence alone represented a 940 percent increase (over 1984-88 levels) in the incidence of reported measles in children less than 12 months old, and a 600 percent increase in reported cases among preschoolers (CDC, 1990). The incidence of measles has dramatically declined in the last two years, to about 2,200 cases (Orenstein,

1993). As much as 1 in 2 low-income children under two are not vaccinated, however, so many children are still at risk of contracting measles and other vaccine-preventable diseases. (Children's Defense Fund, 1992). Of these, unvaccinated infants and toddlers in out-of-home child care are likely to be at increased risk.

Beyond immunization, involvement with health care providers is inadequate, even in a program specifically designed for low-income children, such as Early and Periodic Screening, Assessment, Diagnosis and Treatment (EPSDT). In 1989, only 10 percent of EPSDT-eligible children under age five were enrolled in "continuing care arrangements" -- a "medical home" for the child where providers agree to provide the full range of EPSDT screening, diagnosis, treatment and referral for follow up services as well as all physician services under Medicaid (More children are screened than are enrolled in a continuing care arrangement). However, almost 1 in 4 children had "referable conditions" -- possible health problems that required follow up (Health Care Financing Administration (HCFA), 1990).

Although this example has stressed the prevention of illness, the treatment of mild illness also raises special concerns for the children, parents and providers participating in early care and education services (Fredericks, Hardman, Morgan & Rodgers, 1985; Griffin, 1993; Parmelee, 1993). Better connections between health care and early childhood programs would lead to better-informed and more family-supportive resolutions of these issues as well.

The health needs of early care and education providers

A similar profile of both increased risk and decreased access to primary health care services characterizes child care providers as well. In 1989, only one-third of the teaching staff at child care centers received fully or partially-paid health insurance (Whitebook et al, 1989). However, the nature of their work with very young children brings them into constant contact with infectious agents--including vaccine-preventable diseases which may endanger their own under or unimmunized children or a fetus being carried by a pregnant child care provider. In addition, certain occupational risks--such as back injuries--are closely related to the care of groups of young children (M. Whitebook, personal communication, 1992).

B. The needs of families facing financing and time shortage barriers to participation in health care

Barriers to participation in preventive and primary health care include:

(1) the significant geographical distances which separate low-income families from ongoing sources of health care;

(2) the cost of health care;

(3) typical nonavailability of employer-sponsored health insurance for the working poor;

(4) impediments to obtaining Medicaid coverage or to finding health care providers who will accept Medicaid patients.

(Children's Defense Fund (CDF), 1991; Klerman, 1991; National Association for Community Health Centers (NACHC), 1991; National Commission on Children, 1991).

While the health system has the primary responsibility for reducing these barriers, with appropriate reimbursement and staff, early childhood programs can help families, in essence, climb over them.

Financing barriers

The United States is one of the few industrialized nations without national health insurance. Most persons with private health insurance receive this coverage as a fringe benefit of employment. Increasingly, the high cost of health insurance and the shift in the U.S. economy from a manufacturing to a service economy have left more and more Americans without health coverage.

Many parents using publicly-funded child care have no or inadequate health insurance. Thirty-seven (37) million Americans now have no health insurance coverage and an even greater number have inadequate coverage. More than eight (8.3) million children have no insurance at all--despite their parents' employment. About two-thirds of uninsured children have at least one parent who works full-time. Another 13% have a parent who works part-time (Lewin/ICF, in National Commission on Children, 1991). One-third of the children under six whose family incomes fall below the poverty level (and about 23% whose family incomes are between 100 to 200% of poverty) presently have no health insurance--neither private nor Medicaid insurance (Klerman, 1991).

Furthermore, exclusion of coverage for pre-existing conditions, limitations on the types of services reimbursed, and limitations on the amount of reimbursement provided all contribute to place access to health care beyond the means of many Americans.

Medicaid provides health insurance coverage for many children and adults in low-income families. Of all the children and adults covered by Medicaid, several populations are of particular relevance to early childhood programs (see Chavkin & Pizzo, 1991, 1992 for a fuller description of Medicaid-eligible populations):

- all children and their caretaker relatives receiving Aid to Families of Dependent Children (AFDC);
- children under the age of six, pregnant women and postpartum mothers in families with incomes up to 133% of the poverty line;
- children aged 6 to 10 in 1993, (and older in subsequent years, under a special phase-in[2]), whose family incomes are less than 100% of the poverty line.

States must provide Medicaid to these populations.

In the current fiscal climate, Medicaid financing is stressed by the fiscal crises in states and by recession-induced factors, including the growth of the ranks of the unemployed and of the uninsured. In addition, low reimbursement rates to Medicaid providers and paperwork problems keep many health care providers from participating in Medicaid. However, Medicaid is a primary source of financing for health care for low-income individuals.

Furthermore, child participation in the prevention-oriented Early and Periodic Screening, Diagnosis and Treatment (EPSDT) component of Medicaid is associated with reduced medical costs (Klerman, 1991). Unfortunately, many parents whose children qualify for Medicaid (including parents whose children participate in early childhood programs as well as many early childhood program staff with eligible children) do not know about Medicaid - or its special component for children, the EPSDT program.

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[2]In 1991, benefits were available to 6 to 8 year olds; in 1992, to 9 year olds and in 1993, they will be available to 10 year olds. The expansion will continue by one year of age each year until all children between the ages of 6 and 19 are reached.

As will be discussed more fully below, Medicaid is also a possible source of financing for health-related activities by early childhood programs (Chavkin & Pizzo, 1991, 1992). Providing information and outreach about EPSDT, for example, to parents of Medicaid-eligible children about the Early and Periodic Screening, Diagnosis and Treatment (EPSDT) program could be one of these Medicaid-reimbursable activities.

Time shortage barriers

In recent years, many documents have usefully analyzed the multifactorial barriers to immunization and other preventive health services that contribute to the immunization and other health crises. (NACHC, 1991; NVAC, 1991). Over the last few years, as many of the nation's health leaders focused on epidemics and outbreaks of vaccine-preventable diseases, the "lens" of this attention chiefly centered on the barriers of vaccine supply, uninsured and/or uninformed clients and underfunded, understaffed primary care services (NVAC, 1991).

These are all significant barriers. However, this paper adopts the position that the shortage of parental time, particularly among low-income employed parents, is another contributing factor.

Low-income employed parents struggle to attain or sustain their family's economic self-sufficiency and simultaneously care for their children. They frequently must rely on time-consuming modes of transportation (e.g. multiple buses) to and from work. Hours not spent in travel or at the workplace are spent in household chores, without the aid of timesaving services and appliances available to more affluent families.

Severely pressed for time then, many low-income employed parents have little time available with which to make and keep appointments, especially for preventive health care services. Thus low-income employed parents may have especially infrequent contact with a health care provider who immunizes, screens and follows up children.

However, many low-income parents do interact, often on a daily basis, with early care and education programs: Head Start programs, child care centers, family child care homes, family resource and support programs with a child care component and pre-Kindergarten programs. Increasingly, low-income employed parents also interact with child care resource and referral agencies--"switchboard" programs that help parents connect with providers and vice versa. (See: "A special word about child care resource and

referral (CCR&R) services").

Thus the health and early care and education services should cooperate to bring outreach, immunization and primary health care services as close as possible to a site where the children and their parents are for at least part of the day--early childhood programs.

III. The Historic and Contemporary Role of a Strong Health Focus in Early Childhood Programs

Since their beginnings, quality early childhood programs have consistently sustained a focus on the health of the child (Cahan, 1989). This historic concern has centered on one or more of three goals:

- protection of the child from risks associated with out-of-home care in groups;
- promotion of good health practices in children and families;
- "supplementary services" - support to families, particularly stressed families, with information and help in accessing needed health, nutritional, mental health and dental services.

These three traditions are discussed more fully below.

A. Protection

Minimally, the historic health focus of early childhood programs has been on protecting the incoming child and participating children from the increased risks of infectious disease attendant on the care of small children in groups. Thus health professionals have long encouraged certain key practices, including:

- immunization;
- regular physical examination and health assessment by a health professional;
- staff practice of handwashing and other techniques

designed to reduce the burden of germs in the children's environment; and

- daily informal checks for signs of disease.

While some practices (e.g. handwashing) have not always been incorporated into state licensing requirements, others, like immunization of children in center-based care, have. (APHA/AAP, 1992).

Thus the emphasis on preventing infectious disease is most evident in high rates of immunization among children in child care centers. Over 90% of young children in licensed child care centers are reported to be immunized (chiefly because state licensure requires immunization as a condition for participation in center-based care) (S. Cochi, Centers for Disease Control, personal communication, 1992).

Less is known about the immunization status of children in family child care homes (child care facilities typically serving six or fewer children), including licensed family child care homes. However, in 1991, 27 states did not even require children in family child care homes serving five or fewer children to be immunized (Pizzo & Jackson, 1991, adapted from Adams, 1990).

Protection of children from injuries while participating in the program has also been a goal of most good quality early childhood programs. An injury prevention focus originates in the wise assumption that young children, oblivious to many dangers, may take unwise risks to their safety. Since groups of children strain even the most talented adult's supervision abilities, risk-reduction through the design and assurance of a very safe facility is as necessary as attentive supervision. With both a safe facility and good adult supervision, children can be encouraged to explore, learn, and strengthen their bodies.

Much of the emphasis on minimizing infectious disease and injury risks in early childhood program environments was originally associated with nineteenth and early twentieth century lifesaving advances in public health knowledge. Thus as early as the nineteenth century early childhood program staff were exhorted to plan and carry out the infectious disease and injury protection children needed (Cahan, 1989). Over the course of the twentieth century, early childhood educators engaged in a long battle for professional and public acceptance of the new knowledge about child development--and the best practices associated with quality early childhood programs. A tendency developed to dismiss the earlier

focus on infectious disease and injury prevention as "custodial care."

This paper adopts the position that all quality early childhood care and education embraces custodial care--the loving care of a child's small body--and weaves it throughout the care of a child's mind, heart and soul.

Conversely, quality early childhood programs embrace education--including health and safety education--and weave developmental learning experiences from the small child's developmentally appropriate preoccupation with and delight in her body. Custodial and educational approaches to the whole child are so interwoven together in developmentally appropriate practice that it is impossible to exalt one above the other.

In the last fifty-odd years, a policy and practice focus on only custodial care was rightfully rejected as insufficient for young children. However, the debate today which rages between "care" and "education" has its roots in a rejection of custodial care as both insufficient to meet the needs of the whole child and inferior to higher concerns. This is particularly unfortunate, since some current realities for young children increase the need for early childhood providers to attend to the health and safety dimensions of good early childhood practice. (T. Schultz, National Associatic of State Boards of Education (NASBE), personal communication, 1992).

For example, children at younger ages now spend more time than ever before in out-of-home environments, making it even more important that early childhood programs meet the physical needs of such very young children well (Pizzo, 1990, 1992; Zero to Three/NCCIP, 1992). In addition, two of the most serious problems in early care and education services today--lax staff-child ratios and high caregiver/teacher turnover--endanger both the health and safety as well as the social, emotional and intellectual development of children, making it even more important that risk reduction (and the case for quality improvement) center on "the whole child." (Whitebook et al, 1989; Willer, Hofferth, Kisker, Divine-Hawkins, Farquhar & Glantz, 1991).

B. Promotion of good health practices and early detection of developmental problems

Quality early childhood programs have also long focused on fostering good physical and mental health practices by children

(Cahan, 1989). Caregiver/teachers have taught children to eat well, wash their hands, brush their teeth, toilet appropriately, be alert for safety hazards, engage in vigorous, strength-building play, and respect themselves and others as valuable human beings. When possible, early care and education providers have also provided information for parents about these important dimensions of child development. In addition, skilled caregiver/teachers have been watchful for:

- o signs of trouble in a child--unusual fatigue, hunger, sadness, fearfulness, listlessness, agitation;
- o indications of developmental delay;
- o symptoms of abuse or neglect.

Well-trained caregiver/teachers provide family-supportive referrals when developmental problems are suspected and intervene with the proper authorities if the child's health and/or safety seems at stake.

These dimensions of good practice have been reinforced by the leaders of the field, in program standards, manuals and in training programs for both health and early childhood education practitioners (APHA/AAP, 1992; Aronson & Aiken, 1980; Department of Health, Education & Welfare (DHEW), 1975; National Association for the Education of Young Children (NAEYC), 1984, 1986).

These health-related components of early childhood programs have focused on what can be carried out <u>within</u> the program through skilled observation, modelling of good physical and mental health practices, information-rich interaction with children and parents, sensitive referrals to experts and conscientious but careful intervention when a child's well-being seems at stake (T. Schultz, NASBE, personal communication, 1992). However, fewer quality early childhood programs have taken the next steps: linkage to or co-delivery of health services.

C. <u>Supplementary services</u>

Historically, since the days of the Settlement Houses, some early childhood programs have also helped parents assure a "medical home" for their children (Cahan, 1989; Ross, in Zigler and Valentine, 1979). A medical home is a regular source of health care for both preventive care and primary care, including detection and treatment of mild to moderate illness, injury and health and developmental problems.

Early childhood program focus on providing and/or arranging health and mental health services typically originates in one or both of two concerns:

- o the desire to better support families, particularly low-income or special needs families who may not be able to access health, nutritional, dental and mental health services;

- o the recognition that information obtained from good assessments helps the early childhood program as well as parents. With good information about the child's health status and developmental range and abilities, programs can plan developmentally appropriate practice that meets the needs of each child.

Head Start: health services as core services

Head Start built on these concerns and on its historic origins in the Settlement House movement when it adopted a component approach. One of the four program components emphasizes health, mental health and dental services; another focuses on nutrition services. Provision or arrangement of these services is a core part of every Head Start program.

Since the 1970s, Head Start programs have had health coordinators who worked with parents and health care providers to assure very high levels of participation by Head Start children in health services (Hubbell, 1983; National Head Start Association (NHSA), 1990; Zigler and Valentine, 1979).

Typically over 95% of Head Start children are immunized and receive medical screening and needed treatment (NHSA, 1990)[3]. This contrasts with, for example, a 41% participation rate by poor

[3] There have been recent allegations that the immunization rate among Head Start children is not as high as 95%. Reportedly, the Inspector General at the Department of Health and Human Services has found that only 43% of Head Start children in 80 programs are "completely" immunized (DeParle, 1993). However, it appears that the Inspector General may have used a method for assessing Head Start programs that expects children who are in Head Start for one year to receive all the shots that should be spread out over a two year schedule. (H.Blank, Children's Defense Fund, personal communication, 1993).

children generally in Early and Periodic Screening, Diagnosis and Treatment (EPSDT) services--comprehensive screening, assessment and treatment services akin to the health services mandated by Head Start regulations for Head Start children (Klerman, 1991).

Recent investigations have found that, strained by the multiple, serious health problems affecting low-income children and families, health coordination in Head Start needs strengthening (NHSA, 1990; Stubbs, 1990). Both the Head Start community and the Congress are presently taking steps to improve health coordination within Head Start (NHSA, 1990; Committee on Education and Labor, undated).

Other early childhood programs: the supplementary services approach

A Head Start-like degree of linkage to or co-delivery with health, mental health and dental services, however, did not uniformly characterize the development of other early childhood programs. Perhaps this is related to the multiple origins of child care centers and family child care homes. These services evolved from many "roots", including Settlement Houses for low-income children and their families as well as parent cooperatives and nursery schools serving predominantly middle and upper-middle income children (G. Morgan, personal communication, 1992).

Prior to the 1980s, U.S. middle class children with typical (rather than atypical) needs enjoyed good access to health care. There was not much need for early childhood programs serving these children to become involved in providing or arranging for health and dental services.

As a consequence perhaps, when the National Day Care Study was designed in the early to mid-1970s, this landmark study concentrated on staff-child ratios, group size and staff qualifications as the key characteristics of good quality early care and education. Involvement with health services was defined as "supplemental services" (Ruopp, Travers, Glantz & Coelen, 1979). Some child care programs serving low-income or special needs children might undertake to provide or arrange these supplemental services, but they were not seen as core to a quality child care program. Subsequent national studies of child care followed this pattern (Kisker, Hofferth, Phillips & Farquhar, 1991; Whitebook et al, 1989).

Defining quality child care as care and education with a supplemental--not a core--mission of providing or arranging health

services for children who need them has meant that child care cost reimbursement formulas have often not included reimbursement for the work of staff who would make these arrangements (Willer, 1990). Consequently, early care and education programs serving children with poor access to health care are not typically funded to hire health coordinators.

However, some early childhood programs engage in some aspects of health care services. Thirteen percent (13%) of full-time child care centers do provide physical examinations and 16% provide dental examinations; 55% provide hearing, speech and vision testing (Kisker et al, 1991). Higher proportions of centers serving low-income children, however, offer these services. Thirty-seven percent (37%) of lower-income centers, but only 5% of higher-income centers, provide physical examinations. Forty-two percent (42%) of lower-income centers, but only 7% of higher-income centers, provide dental examinations. (Kisker et al, 1991).

Little is known about the role of on-site or near-site health coordinators in assuring such arrangements in child care centers. However, experts believe that child care centers and homes that do not have access to health coordinators, low-income and/or special needs children in particular usually do not receive the same attention to their health needs as do their peers in Head Start (S. Aronson, American Academy of Pediatrics (AAP), personal communication, 1992).

Programs serving Medicaid-eligible young children may be able to access Medicaid funds to pay part or all of the salaries of health outreach workers or coordinators (Chavkin & Pizzo, 1991; 1992). The use of Medicaid is new to many early childhood programs. Early intervention and special education programs, however, have been using Medicaid funds in the last three to four years, since the passage of both Medicaid expansion and the Individuals with Disabilities Education Act (IDEA). Some family resource and support programs have also used Medicaid to help finance health services for program participants (J. Carter, Family Resource Coalition (FRC), personal communication, 1992).

The contemporary call for collaboration

In recent years, the increasing national attention to school readiness, the general grim fate of low-income children and the health problems of low and moderate income and special needs children with poor access to health care has heightened interest in linking early care and education services with health services.

Many leaders in both the child health and the early care and education communities now call for increased, system-wide collaboration between all early care and education services and primary health care services (American Public Health Association/American Academy of Pediatrics (APHA/AAP), 1992; Boyer, 1991; Committee on Education and Labor, undated; Hamburg, 1991; Klerman, 1991; National Association of School Boards of Education (NASBE), 1991; Schorr, 1988; Zero to Three/National Center for Clinical Infants Programs, 1992).

This paper's author assumes that it should be the responsibility of the primary health care system to provide medical homes for children and families. Early childhood programs should not try to become a medical home. Early childhood programs are not available to the children seven days a week, twenty-four hours a day over the course of the entire childhood. A medical home should be available in just this way.

Seven linkage roles for early childhood programs

However, early childhood programs can and should (if needed) help parents locate and link with a medical home. Thus this paper also takes the position that early childhood program linkage with health services is a core service--not a supplementary service--for all early care and education services. The degree of linkage will vary according to the needs of the population of children served and will range in intensity from:

(1) providing information about health services in the community;

(2) helping parents whose children do not yet have a medical home locate and establish a relationship with one;

(3) providing information, referral and referral follow-up to encourage parents whose children have a medical home to advocate for comprehensive health and developmental assessment, especially if any of the children appear to have special needs;

(4) providing a natural environment where treatment or remediation services can be carried out for children with special but medically simple health care needs --in coordination with the medical homes of the children;

(5) arranging health services for children, in tandem with the child's medical home, and following up to encourage both the keeping of appointments and participation in treatment or remediation, as well as screening and assessment;

(6) providing parts of preventive health services, in strong coordination with the child's ongoing medical home;

(7) providing medical day care for children with medically complex needs, in strong coordination with the child's ongoing medical home.

These seven roles illustrate degrees of intensity of involvement with health services. In deciding how intensive the linkage role should be--and therefore what the costs will be of staff who do the linking--early childhood programs can use a simple principle: the deeper the children's need for health services and the more severe the obstacles to their access to health services the more intensive the linkage needs to be.

Thus programs serving children who typically enjoy good health and good access to health services will be involved in only a mild way with helping children access these services. They might, for example, provide pamphlets or workshops about useful health services available in the community.

However, programs serving children who either have or are at risk of poor health outcomes and whose access to health services is weak or nonexistent would do well to choose a more intensive mode of involvement. With the help of appropriate staff, these programs might, for example, advocate for access to a medical home; and then arrange or provide immunization, simple screening and assessment services--in coordination with the medical home.

Linkage with a medical home should be a recognized, reimbursable cost in early care and education services. States and communities should offer a sliding scale of reimbursement for linkage activities. Programs that are mildly involved in linking children to health services will have only minimal linkage costs. However, programs that have a more intensive involvement should be compensated with a higher amount of funds.

Whether such costs ought to be reimbursed by the early care and education system or by the primary care system (or shared by

both) is an issue that will be discussed later in this paper. But regardless of who reimburses the activity, it is important that it be reimbursed, so that early childhood programs can plan and carry out the necessary linkage activities.

VI. Five Models of Partnership Between Health Services and Early Childhood Programs

As noted earlier, the degree of linkage between health services and early childhood programs might range from minimal to intensive, depending on the needs of the children and families served. While many different types of partnerships are possible, five partnership models which bring together primary health care services and early childhood programs are described in this paper. These models are not mutually exclusive.

In discussing these models, the term "eligible children" includes the eligible children of the child care providers as well as the eligible children served by the child care provider. The term "eligible adults" includes all eligible child care providers as well as parents of the children served by child care.

In addition, all of the models described below assume that parent consent will be obtained before any health service is provided and that parents will be present when their children receive preventive or primary care services, to the greatest extent possible. Screening or immunizing young children without their parents present may prove to be traumatic for the children involved. It also fails to reinforce parental conviction that they are the leaders of their families. Finally, parental involvement with preventive and primary health care services helps parents acquire the knowledge and skills they must have in order to obtain good health care for their children over the long run.

These five partnership models are:

(1) the linkage model

(2) the co-location model

(3) the satellite clinic model

(4) the medical day care model

(5) the mobile primary care model

(1) The linkage model

This model can take several forms:

- the Head Start health coordinator model (DHEW, 1975; NHSA, 1990; Stubbs, 1990);
- the health consultant to child care model (Aronson, 1989; APHA/AAP, 1992);
- the health advocate trained from within the child care staff model (Aronson & Aiken, 1980; APHA/AAP, 1992) or;
- the health coordinator stationed in the child care resource and referral agency model (APHA/AAP, 1992; Chavkin & Pizzo, 1992).

Amid other responsibilities, a trained health coordinator/consultant/advocate can link parents, children and staff in child care to the health resources of the community. As noted above, Head Start health coordinators have, together with parents and health care providers, achieved significantly higher participation by Head Start children in preventive and primary health care than among comparable children who are unable to participate in Head Start or a Head Start-like program.

In the Early Childhood Education Linkage System (ECELS) project, developed by Dr. Susan Aronson, M.D. in Pennsylvania, health professionals (e.g. physicians and nurses) are recruited to voluntarily provide consultation and linkage assistance to child care providers (S. Aronson, personal communication, 1992). In an earlier project--also in Pennsylvania--Dr. Aronson recruited volunteers from child care centers who participated in a health advocacy training course. The newly trained health advocates returned to the child care site equipped to improve the program's health and safety practices (including linkage to health services, if needed) (Aronson & Aiken, 1980).

Child care centers serving low-income children may be able to obtain Medicaid funds to reimburse a health care coordinator (Chavkin & Pizzo, 1991, 1992). Or they might be able to work out a cooperative agreement with a private physician, a community health center or a public health clinic who would supply a health care coordinator/consultant to the child care center part

or full-time.

Child care providers with small numbers of children in care (e.g. family or group child care homes) can network around a child care resource and referral agency or a Child and Adult Care Food Program sponsor that has a health coordinator.

(2) The co-location model

In the co-location model, primary care services (e.g. a community health center) and early care and education services share the same (or neighboring) facilities. Health center staff work closely with child care providers to assure that every eligible child and parent participate in immunization and the full range of primary care services.

Such close geographic proximity permits cross - referrals, the sharing of health and developmental assessment and remediation information (with parental consent and provider observance of confidentiality) and quite possibly the sharing of facility and overhead costs.

With both community health centers and early care and education services expanding, the need to find new or expanded facility space has become acute in both service systems. Co-location, perhaps with the support of the Department of Housing and Urban Development (HUD), may help both service systems. The new statutory authority for Head Start to purchase (rather than just lease) facilities, combined with both the fiscal resources and the facility financing experience of community health centers, could prove to be beneficial to both partners.

Furthermore, co-location would be particularly beneficial for all early childhood programs reaching children under three and their families: Parent-Child Centers, Comprehensive Child Development Programs, family resource and support programs and infant/toddler child care centers. Community health centers and other primary care service sites could also reach family child care homes as well as centers serving children under three and their families by becoming Child Care Food Program sponsors or by housing a child care resource and referral service.

(3) The satellite clinic model

In the satellite clinic model, primary health care

services serve as a central health care source for child care facilities who in turn serve as satellite clinic sites for immunization and initial screening of child and parent health needs --and referral to the primary health care service.

The role of the child care-based satellite clinic might range from:

o minimal (e.g. serving principally as a referral to the clinic--asking the parent if he/she participates in the local maternal and child health clinic or community health center and suggesting that he or she contact the clinic, if reply is no) to

o extensive (e.g. providing immunizations, physical exams and simple health/developmental screening on site-at the child care facility, with the parent present, at times that fit employed parents' schedules. Referrals of parent and child to the maternal and child health clinic or community health center for any health/developmental service more complex than these simple services) can be made at the satellite clinic.

Some Head Start programs are already beginning to develop roles as satellite clinics to community-based health programs. In New Jersey, the Prudential Foundation has provided funds to help make this collaboration possible and the Governor's office has worked closely with Head Start and the primary health care community to help establish the linkages, as part of a Head Start/State Collaboration grant (Children's Defense Fund, 1992; Egas and Miller, 1992; E. Kuhlman, Office of the Governor of New Jersey, personal communication, 1991). In New York, Head Start satellite clinics have offered hearing and vision screening thus far, and local and statewide leadership are hoping to expand to offer a fuller range of health services (M. Verzaro-O'Brien, Region IV Head Start Resource Center, personal communication, 1992). In Mercer County, Pennsylvania, a nurse practitioner from the local primary care health center provides health services to preschool children at the Head Start program. (Lombardi, 1993).

(4) The medical day care model

In the medical day care model, children with medically complex special needs receive child care which most likely involves the delivery of recreational therapy, physical therapy and/or similar services under a plan developed by a health care

professional (e.g. a nurse). In medical day care facilities associated with a primary health care service, the health care professional is likely to be an employee of or a consultant to the health center.

These services are delivered on-site at the child care facility as much as is appropriate and by referral to both the primary health care service and specialized sources of health and developmental care, when needed.

While the services may be provided in a setting which includes children whose health is unimpaired, the primary purpose of this arrangement is to provide child care for children with medically complex special needs. The recent expansion of Medicaid's Early and Periodic Screening, Diagnosis and Treatment (EPSDT) program means that medical day care is now a required service for EPSDT-participating children when determined to be medically necessary. (The Medicaid program has long provided medical day care for elderly and disabled recipients).

If the children's medically complex special needs require ongoing daily supervision by a health care professional, such medical supervision can be provided by the primary health care service. However, once the plan for medical day care is developed by a health care professional, services under the plan can be provided to EPSDT-eligible children by traditional early childhood program staff, with Medicaid reimbursement.

This model is particularly suited to communities where premature birth and/or exposure to/use of toxins (e.g. lead, pesticides, cocaine, alcohol) during pregnancy or the early years has resulted in neurological, respiratory, feeding or other health impairments in infants, toddlers and small children.

(5) <u>The mobile primary care model</u>

In this model, a mobile primary care provider (e.g. a mobile health van or visiting nurse or nurse practitioner) visits child care facilities.

During these visitations the mobile health care practitioner(s) provide routine health and developmental assessment and supervision. Referrals for follow-up assessment and treatment are made to the community health center. The best times for these visits occur either at the points that parents are also there (drop-off or pick-up time for the children) or at previously

publicized days (including weekend days) or evenings so that parents might be able to plan in advance to spend some time at the child care facility.

This model differs from the satellite clinic model in that the health care practitioner(s) are not fixed staff, on-site at the child care facility on a permanent basis. They "rove" through a number of child care sites. It's a model particularly well-suited to smaller child care sites (e.g. small centers and family or group child care homes). It is also well-suited to child care sites separated by substantial distance, such as rural child care programs.

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All of these models are workable and some may be used concurrently[4]. However, none of these models can be realized without sufficient staffing and funding support, specific to the task at hand: forging a close working partnership between early childhood programs and community health centers. These needs are discussed below.

VII. The Resources Needed to Make Partnership Possible

At a minimum, as Head Start has shown, linking children in early care and education services to immunization and the full range of primary care services will require the addition of health coordinators to early childhood programs. However, unless the program is very large, these coordinators do not have to be onsite full-time at early childhood programs. Health coordinators could help link parents and providers to primary health care services

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[4]The different levels of intensity just described do not sort themselves neatly into these five partnership models. For example, health advocacy by a trained program staff member (one example of the linkage model) may be carried out in a fairly intense way for a mainstreamed early childhood setting where many young children with special needs participate, particularly if the program serves uninsured or underinsured families and the community has few health care providers. In contrast, health advocacy may only need to be undertaken in a rather mild fashion in an early childhood setting where the children have more typical needs, their parents have access to good health insurance and the community has an adequate number of health care providers. Same model--but different levels of intensity.

from a site nearby but separate from the early childhood program (e.g. a public health clinic, community health center, resource and referral agency or Child and Adult Care Food Program (CACFP) sponsor).

However, both service systems will need additional resources: knowledge, time and staff - and the partnership-oriented financing which makes these resources possible.

A. Knowledge, time and additional staff

Practitioners in the early care and education field have, for the most part, had training. Ninety-three percent (93%) of center-based caregiver/teachers have had some special training in child development and early education:

- o 47% have at least a four-year college degree;
- o 13% have completed a two-year degree; and
- o 12% have earned the Child Development Associate (CDA) credential. (Kisker et al, 1991).

About two-thirds of regulated family child care home providers have had some special child-related training:

- o 11% have completed college;
- o 44% have some formal schooling beyond college (Kisker et al, 1991).

Child-related training for early care and education providers, however, typically focuses on child development--not on child health. Early childhood program staff frequently know little about child health or about the health care delivery system. Conversely, primary health care professionals may know little about child development and about the delivery system for early care and education services.

Thus practitioners from both service systems need to acquire (or refine) knowledge of:

- o best practices in child health and nutrition as well as child development and family support;
- o the best and most accessible services in the surrounding community, including early care and education, health,

nutritional, employment, training and social services; and

- the sources of relevant financing, if needed, to enable parents to pay for these services.

Finding the financial resources with which to provide training is presently difficult (Lombardi, 1992). Limited training funds are available under the Child Care and Development Block Grant (CCDBG) and under the Special Projects of Regional and National Significance (SPRANS) set-aside of the Maternal and Child Health Block Grant (Title V), if the training is provided as part of a demonstration project. Future federal funds for training--in both maternal and child health care and early care and education services--should emphasize the importance of helping health and early care and education service providers develop the knowledge needed to create effective linkages.

However, perhaps the greatest barrier is the shortage of time. As noted above, employed parents of young children, juggling workplace and family needs, have no time. Early care and education providers involved with the care of groups of children have little time for the kind of unhurried conversation with parents required for exploration of the child's health and nutritional needs and of the community resources available to the parents. Directors of programs have very little time with which to locate and "piece together" funds from multiple funding streams, to help them build partnerships with health services.

Outreach to families--and mutual outreach between health and early childhood programs--involves time. And that time should be compensated, with partnership-oriented financing.(Pizzo, 1992).

B. Partnership-oriented financing: state-administered federal funds

Federal and state financing strategies in both the primary health care and early care and education services generally need to emphasize the importance of supporting:

- more outreach workers;
- additional nurses and/or social workers who act as "bridge" staff-- e.g. health consultants or coordinators;
- specialized health and developmental professionals who act as consultants to early care and education

services.

Advocates and policymakers would do well to examine both the primary health care and the early care and education funding streams for ways they might explicitly designate (and promote) health outreach/coordination as "allowable expenditures" generally in either service system.

Two federal health funding streams and one child care funding stream are particularly good possibilities for state use to support cooperation between health and early care and education services:

- The Maternal and Child Health Services Block Grant (Title V);
- Medicaid;
- The Child Care and Development Block Grant.

The Maternal and Child Health Services Block Grant (Title V)

The Maternal and Child Health Services Block Grant, Title V of the Social Security Act, provides $665 million in Fiscal Year 1993 funds to states. Accompanied by a great deal of federal discretion, Title V is intended to help states finance "a wide range of services to improve maternal and child health." (Klerman, 1991). Thus Title V funds, although they have traditionally been used to finance state and local health agencies, may also be used to help states coordinate health agencies with early care and education services.

Furthermore, recent changes in Title V law encourage the state maternal and child health agencies to take on more of a coordinating role. The 1989 revisions to Title V require the states, for example, to become more goal-directed in their use of Title V funds. In their applications for these funds, states are now required to show evidence that they have:

- conducted statewide assessments every five years of the need for preventive and primary care services for pregnant women, infants, children, adolescents and children with special health care needs;
- carried out these statewide assessments relative to goals consistent with the federal government's Healthy People

2000 objectives;

- o developed a plan for meeting identified needs; and
- o described how they will use block grant funds to meet these needs. (Klerman, 1991).

The need for partnership between local and state health and early childhood agencies--and for partnership-oriented financing--can now be clearly identified by local policymakers, practitioners and children's advocates during this statewide assessment. To meet the need for health coordinators at child care and/or resource and referral programs, local groups can strongly encourage, for example, the use of Title V funds and/or the outplacement of some Title V-funded public health nurses currently stationed in health clinics.

Medicaid

Currently, open-ended federal matching funds are available under Medicaid for a variety of health-related purposes. States that can provide a state match effectively ranging from 22 to 50% can draw down Medicaid to encourage partnerships between health and child care.

Medicaid is a health care financing system with many contemporary demands on it, including spiralling numbers of elderly who need long-term care, large numbers of individuals and families who have lost their health insurance, lost their jobs or both and rising costs generally in the health sector. Thus Medicaid costs increased by $24 million in Fiscal Year 1992. ("Medicaid Cost," 1993). Consequently, some states may be reluctant to support better-connected health and early care and education services with Medicaid, pending health care reform. However, if health care reform results in better financing approaches for those in need of long-term care and employed individuals whose health care insurance used to be provided partially or wholly by employers, states may more interested in examining the possibilities for containing health care costs that lie in a range of preventive measures--including prevention-focused partnerships between health and early care and education services.

For example, states can use Medicaid to fund centers or other child care programs to:

(1) inform parents about or help them locate and/or travel to health and developmental assessment and services needed by Medicaid-eligible children;

(2) transport Medicaid-eligible children (with their parents or other attendants) to necessary medical care;

(3) provide some preventive health services, such as health and developmental assessments;

(4) provide remediation and treatment services to children with special needs;

(5) provide medical day care pursuant to a plan established by a qualified health professional (e.g. a nurse) designed to treat or remediate a physical or mental illness or condition of children (Chavkin and Pizzo, 1991, 1992).

There are several categories of eligibility for Medicaid. For purposes of planning partnerships between early care and education services and primary health care, however, it is most essential to understand that in every state children under the age of six whose family incomes are below 133% of the poverty line are eligible for Medicaid and for the Early and Periodic Screening Diagnosis and Treatment (EPSDT) program. (See Chavkin and Pizzo, 1991, 1992 for a fuller description of Medicaid eligibility categories).

The service that early childhood programs call health coordination is called case management in Medicaid parlance. Case management is defined in one section of the Medicaid law as services which "assist individuals eligible under the plan in gaining access to needed medical, social, educational and other services." (Section 1915(g)(2) of the Social Security Act). Thus the salaries of those who assist Medicaid-eligible families in these ways (e.g. health coordinators) may be able to be wholly or partly financed by Medicaid.

Historically, case management is an optional service - one that states must designate in their State Plan for it to be a reimbursable service within the state. However, since April 1, 1990, if case management is a medically necessary service for an EPSDT-participating child, it is a mandatory--not an optional--service for that child (See Chavkin and Pizzo, 1991, 1992 for a fuller description of reimbursable services).

Medicaid funds for the kind of case management described above would help finance the "linking" services that bridge the gap

between early childhood programs serving low-income children and families and primary health care services. Consequently, states should consider financing EPSDT outreach from child care to eligible families with Medicaid funds, perhaps using state appropriations for early care and education services as the required state match. Where early childhood programs also serve children who are not eligible for Medicaid and EPSDT, states can use Title V funds to finance this kind of outreach.

Child Care and Development Block Grant (CCDBG)

The Child Care and Development Block Grant provides $893 million in Fiscal Year 1993 funds to states to help them improve the accessibility, affordability and the quality of child care for families of children under 13 in households up to 75% of the state's median income. Authorized in 1990, the CCDBG provides funds that do not require a state match, so these are particularly helpful funds in states struggling with fiscal crises.

The preponderance of CCDBG funds are intended to finance child care and development services. However there are two earmarks within the CCDBG law that reserve funds for quality improvements in child care:

- 5% of the total appropriation; and
- 15% of the 75% of the total appropriation that is set-aside for financing child care services. This 15% can be used by states for either administrative or quality improvement activities.

There is no bar in the CCDBG legislation prohibiting states from tapping this source of funds for health-related child care quality improvement activities. In fact, the CCDBG legislation requires states to implement state-established health and safety standards, including infectious disease and injury control as well as training, in CCDBG-funded nonrelative care. Thus, for example, states should be able to use CCDBG funds earmarked for quality improvement to support training for staff who seek to become health advocates or to co-fund (with Title V) health coordinators and other health-related outreach and coordination activities at CCDBG-participating centers and child care resource and referral agencies.

However, this use of CCDBG funds is not specifically mentioned

in the 1990 legislation. Hopefully, it will be specified in the statute when it is reauthorized, so that those states that want to blend Title V, Medicaid (matched with state dollars) and CCDBG funds to, for example, place health coordinators/trainers in child care centers and/or Resource and Referral agencies, will feel freer to do so.

Federally-administered funds

Although this paper primarily deals with state-administered funds, several sources of federally-administered funds might also be pieced together at the local level to help finance cooperation between health and early care and education services. These include Head Start and Sections 329 and 330 of the Public Health Service Act, which funds community and migrant health centers. In 1992, these sections of the Public Health Service Act were amended to specifically authorize the Secretary of the Department of Health and Human Services to fund community education, outreach, case finding, case management and client education, including parenting and child development education in order to reduce morbidity (e.g. disease) and mortality among children younger than three years of age. (S. Rosenbaum, George Washington University, personal communication, 1992).

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Thus some of the resources which are needed to better connect health care and early care and education services are in place; others still have to be developed. Federal and state policy is needed, both to authorize and fund essential new resources but also to blend existing resources into a system of supports to a coherent strategic plan for connecting all children and adults in early childhood programs to health care.

VIII. Recommendations for State and Federal Policy

A. State policy

The Governor of each state should:

1. establish a task force which brings together the key state administrators from the health, human services, education and budget agencies;

2. charge this interagency task force to:

   - develop a vision of family-supportive health/early care and education collaboration for that state;
   - create a strategic plan to promote the envisioned collaboration;
   - include in this strategic plan[5]:
     - an analysis of the state's need for this collaboration;
     - proposed goals, objectives and benchmarks for indicating progress towards collaboration;
     - an assessment of both actual practice and of barriers related to effective collaboration;
     - recommendations for the financing, regulatory and nonregulatory (including training) policy changes that the state should take to promote this collaboration;
     - provision for evaluation of the recommended changes, once implemented.

With regard to regulatory changes, each state should:

- require immunization for all children in nonrelative out-of-home care serving two or more children;
- compare state health and safety requirements to the standards established by Caring for Children, the American Public Health Association/American Academy

[5] Florida has created a Strategic Plan for Prevention and Early Intervention (Florida Department of Health and Rehabilitative Services and Florida Department of Education, 1991). This section draws from Florida's example.

of Pediatrics guidelines for out-of-home child care programs;

- o adopt or change existing requirements in areas where key health and safety regulatory practices are in conflict with the recommendations of Caring for Children; and

- o adopt or change monitoring practices so that these health and safety requirements can be implemented.

With regard to nonregulatory changes, each state should:

- o develop a financing plan which blends state-administered health care funds with early care and education funds (Pizzo, 1992), to make it more possible for child care resource and referral agencies and early childhood programs to hire health coordinators, train practitioners from both service systems and develop public education materials that help providers conduct outreach and refer parents to needed services;

- o develop a career development-focused training plan for early care and education teacher/caregivers (Costley, 1991; Morgan, 1991) and require health-related training for all regulated providers, within the context of the overall state training plan.

B. Federal policy

1. The Secretary or Health and Human Services and the Secretary of Education should develop a joint task force composed of key federal administrators from the health, human services, education and budget agencies.

2. This interagency task force should:

   - o develop national goals for U.S. early care and education services, including goals achievable through cooperation with health services;

   - o analyze current federal legislative and administrative policy to ascertain the elements which aid and those which impede progress towards those goals;

- propose to the Congress federal legislative and budget changes that would help states and local communities reach these goals;

- make federal financing, regulatory and nonregulatory policy changes that are within the discretion of the President and would help states and local communities reach these goals;

- evaluate the effectiveness of federal actions to encourage and help states improve the quality of early care and education services, including improved connections between health and early childhood programs.

With regard to <u>legislative</u> changes, the federal government should:

- amend the Maternal and Child Health Block Grant (Title V) to require that, to be eligible for these funds, states must provide free or low-cost:

    - vaccines to health care providers who will in turn provide them to children participating in early care and education services;

    - screening for infectious disease to children, parents and providers participating in early care and education services;

    - injury control devices and equipment required by these regulations (e.g. smoke detectors, impact cushioning);

    - health and safety training; and

    - informational materials that explain to early care and education providers how they might best meet these requirements.

- amend the Child Care and Development Block Grant and the Family Support Act so that both statutes clearly require, as a condition for receipt of these funds,

states to in turn require:

- o immunization of children in nonrelative care serving two or more unrelated children;
- o handwashing, screening for infectious disease and other measures to control infectious disease;
- o smoke detectors, appropriate impact-cushioning materials under elevations and other measures to control injury; and
- o participation in health and safety-related training.

- o clearly earmark funds authorized under the Child Care and Development Block Grant and the Family Support Act for states to use in implementing this immunization requirement, e.g. to hire more monitors so that immunization records can be checked; to provide more technical assistance so that child care providers and child care resource and referral agencies know what is expected and why, etc.;
- o earmark funds authorized under the Maternal and Child Health Block Grant for states to use to provide immunization and health-related training, outreach, consultation and coordination to early childhood practitioners--as well as training to health practitioners about providing health consultation to early care and education programs; and
- o increase the amount of federal funds available to states for early care and education as well as maternal and child health activities.

With regard to <u>regulatory</u> changes, the federal government should:

- o amend the federal regulations for both the Child Care and Development Block Grant and the Family Support Act so that they:

- clearly support the legislated immunization and other health and safety requirements mentioned above.

With regard to nonregulatory changes, the federal government should:

- take the lead in developing national goals for early care and education services via a national consensus development process--with one goal being that all children in nonrelative child care serving two or more unrelated children be age-appropriately immunized;

- fund a national resource center for quality improvement in early care and education services, to provide technical assistance to help states achieve the national goals for early childhood care and education;

- negotiate technical assistance "compacts" with each state to encourage and provide goal-directed technical assistance (Pizzo, Griffin, Argenta & Szanton, in press) to help each state--in an individualized way--achieve the national goals for early care and education services;

- provide educational materials and roving health and early childhood experts who travel to state capitols to help states plan how to achieve the national goals for early care and education services;

- help states develop blended financing plans that enable them to reach more children and families with higher quality early care and education services, including services that better connect to on-site or near-site immunization and preventive and primary health care outreach and services.

In addition, the federal government might consider proposing a Child Care Health Program, perhaps as a companion to the Child and Adult Care Food Program, to help states fund the preventive and remedial services needed to better protect and promote the health of children--including children with special needs--in early care and education services. This program would be particularly helpful to those children for whom Medicaid and Title V funds are either

insufficient or inaccessible.

Conclusion

For too long, the nations' young children have gone without the basics of preventive and primary health care. Some of these young children have participated in publicly-funded early care and education services--without adequate protection against disease or injury.

In addition, for too long, the adults who work in early care and education services have gone without preventive and primary health care. Most of these dedicated adults forego salaries and benefits (including health insurance) that they might well be assured in other workplaces. As a result, some cannot provide health care for their own children, because they choose to provide early care and education to other people's children--in a nation that has not seemed to value either preventive and primary health care or quality early care and education for children and families generally.

Now the nation is moving towards health care reform, with an emphasis on equal access to insurance, preventive health care and cost-containment. Closer cooperation between health and early care and education services would result in more:

- providers of early care and education learning about and being able to access health care for themselves and their families, with a possible concomitant reduction in the staff turnover which drains quality from America's early childhood programs;
- children and families obtaining the primary and preventive health care services that yield such good human and economic benefits;
- low and moderate income employed families being able to comply with the demands of the workplace and achieve or sustain economic self-sufficiency, while simultaneously assuring that their children receive preventive and primary health care;
- cost-effective use of existing federal and state funds, since health and child care funds could be better fitted together to complement each other in supporting outreach to and care for the "whole

child" and his/her family; and

- o tangible, quantifiable results from the investments made by the public in both early care and education as well as preventive and primary health care.

In this paper, we have examined the need for better connection between health and early care and education; levels of intensity to this connection; models of partnership. the partnership-oriented financing and other resources needed to make better connections possible; and recommendations for state and federal policy changes that would better support connectedness between health and early care and education services.

Certainly the waters that low and moderate income families--as well as families with children with special needs--have had to navigate in order to protect their offspring from disease and injury and promote their general health and development are troubled indeed. But America is a nation of bridge-builders. And the bridges we build between health and early care and education services could be one of our best investments yet.

BOX

A special word about child care resource and referral (CCR&R) services

Child care resource and referral agencies (CCR&R's) are important touchpoints for parents and child care providers - and potentially for primary health care services as well. Parents seeking to arrange nonrelative child care can do so with the aid of R&R's. These agencies maintain lists of providers - including license-exempt family child care providers - and can refer parents to providers who meet the family's needs (assuming a community with an adequate supply of adults who are child care providers).

CCR&R's also recruit adults to become child care providers and often provide advice and consultation as well as training to providers who are (or seek to become) registered, licensed or approved - as well as those exempt from regulation. CCR&R's are sometimes also sponsors for the Child and Adult Care Food Program. (The Child and Adult Care Food Program provides commodities and reimbursement for food, as well as nutrition education and counseling to sponsored family child care homes, nonprofit child care centers and for-profit centers serving 25% or more low-income children).

REFERENCES

American Public Health Association, & American Academy of Pediatrics. (1992). Caring for our children: National health and safety performance standards: Guidelines for out-of-home child care programs. Washington, D.C.: Author.

Aronson, S., & Aiken, L. (1980). Compliance of child care programs with health and safety standards: Impact of program evaluation and advocate training. Pediatrics, 65, 318-325.

Aronson, S. & Gilsdorf, J. (1986). Prevention and management of infectious diseases in day care. Pediatrics in Review, 5, 259-268.

Aronson, S. (1989). Child care and the pediatrician. Pediatrics in Review, 10, 277-286.

Atkinson, W. (1993, January). Memorandum on measles update: provisional total for 1992. Unpublished memorandum to Walter Orenstein, M.D., Director, Division of Immunization, from Bill Atkinson, M.D., Medical Epidemiologist, Centers for Disease Control.

Boyer, E. (1991). Ready to learn: A mandate for the nation. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.

Cahan, E. (1989). Past caring: A history of U.S. preschool care and education for the poor, 1820-1965. New York, NY: National Center for Children in Poverty.

Centers for Disease Control. (1990). Plan of Action: Infant Immunization Initiative. Unpublished paper of Division of Immunization Services, Center for Prevention Services, Centers for Disease Control, Department of Health and Human Services, Atlanta.

Chavkin, D., & Pizzo, P. D. (1991). Head Start and medicaid: a new marriage for the 1990s. NHSA Journal, IX(4), 53-57.

Chavkin, D., & Pizzo, P. D. (1992, March). Medicaid and child care: good partnership potential. Young Children, 47(3), 39-42.

Children's Defense Fund. (1991). The state of America's children

1991. Washington, DC: Author.

Children's Defense Fund. (1992). The state of America's children 1992. Washington, DC: Author.

Committee on Education and Labor, U.S. House of Representatives. (undated). "Summary of HR 5630, the Head Start Improvement Act of 1992."

Costley, J. (1991). Career development systems in early care and education: A planning approach. Boston, Massachusetts: Center for Career Development in Early Care and Education.

DeParle, J. Sharp criticism for Head start, even by friends. New York Times, March 19, 1993.

Dunst, C., Johanson, C., Trivette, C., & Hamby, D. (1991, October/November). Family-oriented early intervention policies and practices: Family-centered or not? Exceptional Children, 58(2), 115-126.

Egas, C. & Miller, R. (1992, May). "Head Start/state collaborative projects: Index of activities." Unpublished document.

Feigin, R. & Pickering, L. (1990). Infections in Day Care Centers. Seminars in Pediatric Infectious Diseases. 1,(2).

Florida Department of Health and Rehabilitative Services and Florida Department of Education. (1991). Strategic plan for prevention and early intervention as required by chapter 411, F.S. Tallahassee, Fl: Author.

Fredericks, B., Hardman, R., Morgan, G., & Rodgers, F. (1985). A little under the weather: A look at care for mildly ill children. Boston, MA: Work/Family Directions, Inc.

Galinsky, E., & Weissbourd, B. (1992). Family-centered child care. In B. Spodek & O. Saracho (Eds.), Year book in early childhood: Focusing on child care (Vol. 3). NY: Teachers College Press.

Granoff, D. M., & Cates, K. L. (1985). Hemophilus influenza type B disease in daycare. In M. C. Sharp, & F. W. Henderson, (Eds.), Daycare: Report of the Sixteenth Ross Roundtable on critical approaches to common pediatric problems (pp. 52-61). Columbus, OH: Ross Laboratories.

Griffin, A. (1993). Caring for mildly ill infants and toddlers in the context of child care: Emotional, medical and practical perspectives. Zero to Three, 13, 4, 15-23.

Gross, R. T., & Hayes, C. (1991). Implementing a multi-site, multidisciplinary clinical trial: The infant health and development program. Zero to Three, XI(4), 1-7.

Hamburg, D. (1991). The family crucible and healthy child development. Report of the President. In Carnegie Corporation fo New York, Annual Report 1991. New York: Carnegie Corporation of New York.

Health Care Financing Administration. (1990). Office of Medicaid Management Memo to Maternal and Child Health Colleagues Regarding Early Periodic Screening, Diagnosis and Treatment (EPSDT) Program Performance Indicators -- INFORMATION. Washington, DC: Department of Health and Human Services. March 13.

Hubbell, R. (1983). A review of Head Start research since 1970. Washington, D.C.: Government Printing Office.

Infant Health & Development Program. (1990). Enhancing the outcomes of low-birthweight, premature infants. Journal of the American Medical Association, 263, 3035-3042.

Jarman, F.C., and T.M. Kohlenberg (1988). Health and safety implications of day care. Paper presented for the Panel on Child Care Policy, Committee on Child Development Research and Public Policy, Commission on Behavioral and Social Sciences and Education, National Research Council, Washington, D.C.

Kagan, S., Powell, D., Weissbourd, B., & Zigler, E. (Eds.). (1987). America's family support programs. New Haven: Yale University Press.

Kisker, E., Hofferth, S., Phillips, D. & Farquhar, E. (1991). A profile of child care settings: early education and care in 1990. (I). Princeton, NJ: Mathematica Policy Research, Inc.

Klerman, L. (1991). Alive and well? A research and policy review of health programs for young children. NY: National Center for Children in Poverty.

Lally, J. R., Mangione, P. L., Honig, A., & Wittner, D. (1988).

More pride, less delinquency: Findings from the ten year follow-up study of the Syracuse University family development research program. Zero To Three, VIII(4), 13-18.

Lewin/ICF, in National Commission on Children. (1991). Unpublished analysis of the Lewin/ICF Health Benefits Simulation Model, in National Commission on Children, Beyond rhetoric: A new American agenda for children and families. Washington, D.C.: Government Printing Office.

Lombardi, J. (1992). Know your state's financing resources: A guide to funding career development in early care and education. Boston, MA: Wheelock College Center for Career Development in Early Care and Education.

Lombardi, J. (in press). Head Start and health services: A natural partnership. NHSA Journal.

Medicaid cost jumped 25% in '92 fiscal year, U.S. says. (1993). New York Times, March 19, 1993.

Morgan, G. (1991). Career development systems in early care and education: A concept paper. Boston, MA: Center for Career Development in Early Care and Education.

National Academy of Sciences (1990). Who cares for America's children? Child care policy for the 1990s. Washington, D.C.: Author.

National Association of Community Health Centers. (1990). A snapshot view of community health centers after 25 years. Washington, D.C.: Author.

National Association of Community Health Centers. (1991). Accepting the challenge: Healthy children 2000. Washington, D.C.: Author.

National Association for the Education of Young Children (NAEYC). (1984). Accreditation criteria and procedures of the National Academy of Early Childhood programs. Washington, DC: Author.

National Association for the Education of Young Children (NAEYC). (1986). Developmentally appropriate practice. Washington, DC: Author.

National Association of State Boards of Education. (1991). Caring communities: Supporting young children and families.

Alexandria, VA: Author.

National Commission on Children. (1991). Beyond rhetoric: A new American agenda for children and families. Washington, DC: U.S. Government Printing Office.

National Head Start Association (1990). Head Start: The nation's pride, the nation's challenge. Alexandria, VA: Author.

National Vaccine Advisory Committee. (1991). The Measles Epidemic: The problems, barriers and recommendations. Washington, DC: Author.

Parmelee, A.H. (1993). Children's illnesses and normal behavioral development: The role of caregivers. Zero to Three, 13, 4, 1-9.

Pizzo, P. D. (1990). Family-centered Head Start for infants and toddlers: A renewed direction for Project Head Start. Young Children, 45(6), 30-35.

Pizzo, P. (1992). Financing family-centered infant child care. Arlington, VA: Zero to Three/National Center for Clinical Infant Programs.

Pizzo, P.D., & Jackson, B.R. (1991). "Memorandum regarding Meeting with Secretary Sullivan on Child Immunization/Child Care Issues." unpublished document. November 26, 1991. Information about requirement of immunization in child care adapted from Adams, G. Who knows how safe? Washington, DC: Children's Defense Fund.

Pizzo, P.D., Griffin, A.B., Argenta, D. & Szanton, E. (In press). Lessons learned: The case study of the Better Care for the Babies Project. Arlington, VA: Zero to Three/National Center for Clinical Infant Programs.

Ross, C. (1979). Early skirmishes with poverty. In E. Zigler and J. Valentine. (Eds.) Project Head Start: A legacy of the War on Poverty. (pp. 21-43). NY: Free Press.

Ross, C. (1983). Advocacy movements in the century of the child. In E. Zigler, S.L. Kagan & E. Klugman. Children, families and government: Perspectives on American social policy. (pp. 165-77). Cambridge: Cambridge University Press.

Ruopp, R. R., Travers, J., Connell, D., & Goodrich, D. (1979).

Children at the center: Final report of the national day care study (Contract No. 105-74-1100). Cambridge, MA: Abt Associates.

Schorr, L. (1988). Within our reach: breaking the cycle of disadvantage. NY: Doubleday.

Select Committee on Children, Youth and Families, U.S. House of Representatives (1988). Opportunities for success: Cost effective programs for children: Update, 1988. Washington, DC: Government Printing Office.

Shelton, T. L., Jeppson, E. S., & Johnson, B. (1987). Family-centered care for children with special health care needs. Washington, DC: Association for the Care of Children's Health.

Stubbs, P. (1990). Head Start health coordinators' task force report. Unpublished document.

U.S. Department of Health, Education and Welfare. (1975). "Head Start Performance Standards" 45 CFR, Vol. 40, No. 126, June 30, 1975.

Weiss, H., & Jacobs, F. (Eds.). (1988). Evaluating family support programs. Hawthorne, NJ: Aldine de Gruyter.

Whitebook, M., Howes, C., & Phillips, D. (1989). Who cares? Child care teachers and the quality of care in America. Oakland, CA: Child Care Employee Project.

Willer, B. (Ed.). (1990). Reaching the full cost of quality in early childhood programs. Washington, DC: National Association for the Education of Young Children.

Willer, B., Hofferth, S. L., Kisker, E. E., Divine-Hawkins, P., Farquhar, E., & Glantz, F. B. (1991). The demand and supply of child care in 1990. Washington, D.C.: National Association for the Education of Young Children.

Zero to Three/National Center for Clinical Infant Programs. (1992). Heart Start: The emotional foundations for school readiness. Arlington, VA: Author.

Zigler, E. and Valentine, J. (1979). Project Head Start: A legacy of the War on Poverty. NY: The Free Press.